

In the Drawings

Applicant submits herewith replacement drawing sheets to be entered in the application.

Amendment to the Drawings:

The attached sheet of drawings includes a change to FIG.6, in which reference numeral 140 is replaced by 150. This sheet, which includes FIGs. 5 and 6, replaces the original sheet including FIGs. 5 and 6.

REMARKS

The Examiner is thanked for the thorough examination of the present application and the indication that claims 13-21 contain allowable subject matter. After entry of the foregoing amendments, claims 1-25 remain pending in the application. Claims 1, 3-6, 8-12 and 22-24 are rejected under 35 U.S.C. 102(e) as allegedly anticipated by Kunikiyo (US 6,717,267). Claim 7 is rejected 35 U.S.C. 103(a) as allegedly unpatentable over Kunikiyo (US 6,717,267). Claims 2 and 25 are rejected under 35 U.S.C. 103(a) as allegedly unpatentable over Kunikiyo (US 6,717,267) in view of Khan et al (US 6,853,070). Claims 13-21 are objected to only as being dependent upon a rejected base claim.

Applicant has amended claims 1, 13, 22-23 and 24 to more clearly identify a novel and non-obvious aspect of certain embodiments. Amendments of claims 1, 13, 22-23 and 24 are clearly support in specification and figures, and therefore add no new matter to this application.

Claim 1

Amended claim 1 recites, among other distinguishing features, that "the plurality of interconnect structures are disposed within a power line". The amended claim 1 contains a patentable feature originally embodied as a part of claim allowable claim 13. All recited references, singly or combination thereof, fail to teach or suggest the plurality of interconnect structures are disposed within a power line.

It is therefore submitted that amended claim 1 is patentable. As claims 2-21 directly or indirectly depend from amended claim 1, claims 2-21 are patentable by virtue of their dependency from patentable amended claim 1.

Claim 22

Amended claim 22 recites, among other distinguishing features, that “each of the plurality of bridges is alternatively spaced apart from a serpentine power line by a distance”. The Examiner asserts that Kunikiyo shows that the plurality of interconnect structure (26c and 26a) is alternatively spaced apart from a serpentine power line 25a by a distance (e.g. fig 9). Applicant disagrees with the above assertions and respectfully submits that the interconnection 19a is surrounded by *the dummy interconnections 21a, 21c, and 25a and the dummy plugs 16c, 26a and 22a*, which provides a remarkable shielding effect (col. 7, lines 26-29).

More specifically, a dummy interconnection is an interconnection that is not directly related to the circuit operation of the semiconductor device and whether they are present or absent makes no difference on the circuit diagrams of the semiconductor. The concept of dummy interconnection is widely used in this field of art and is clear to those having ordinary skill in the art (col. 25, lines 54-63). Thus, it is submitted that the dummy interconnection 25a is not a power line, and for at least this reason amended claim 22 patentably defines over the cited art.

Claim 23

Amended claim 23 recites, among other distinguishing features, that “the plurality of interconnect structures are *periodically spaced apart along a longitudinal axis of the plurality of power lines* by a distance”. The Examiner asserts that Kunikiyo shows that a plurality of interconnects structures are close to a power line 19c (see fig. 13). However, Kunikiyo fails to teach or suggest that the plurality of interconnect structures are periodically spaced apart along a longitudinal axis of the plurality of power lines by a distance. For at least this reason, amended claim 23 patentably defines over the cited art.

Claim 24

Amended claim 24 recites that “the plurality of interconnect structures are formed within the plurality of power bus lines”. Applicant respectfully submits that Kunikiyo fails to teach or suggest forming the plurality of interconnect structures within the plurality of power bus lines. All recited references, singly or in combination, fail to teach or suggest the plurality of interconnect structures are formed within the plurality of power bus lines.

For at least this reason, amended claim 24 patentably defines over the cited art. As claim 25 directly or indirectly depends from amended claim 24, claim 25 is patentable by virtue of its dependency from patentable amended claim 24.

For all of these reasons, Applicant submits that this application is now in condition for allowance. Prompt issuance of a Notice of Allowance is earnestly solicited.

Cited Art Made of Record

The cited art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicants respectfully submit that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that the pending claims are in condition for allowance.

Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee to deposit account No. 20-0778.

Respectfully submitted,



Daniel R. McClure, Reg. No. 38,962

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

Suite 1750
100 Galleria Parkway N.W.
Atlanta, Georgia 30339
(770) 933-9500

Annotated Sheet

0503-A30207-USf/bmc/ulysses

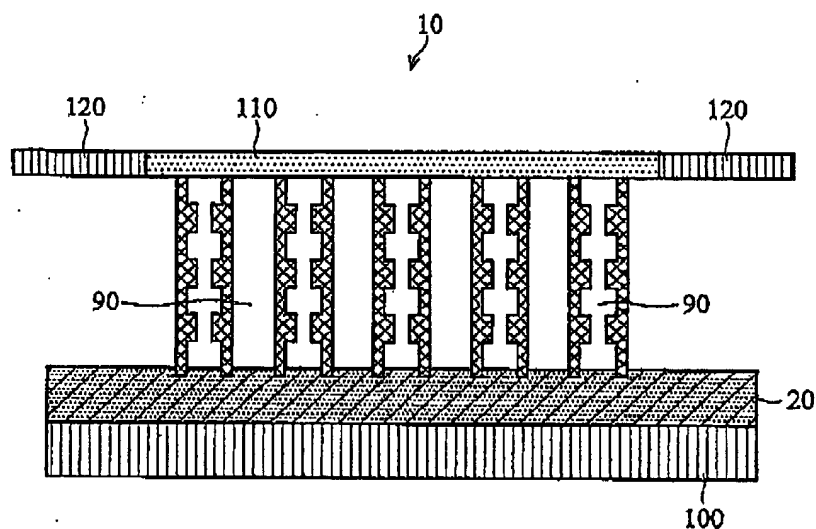


FIG. 5

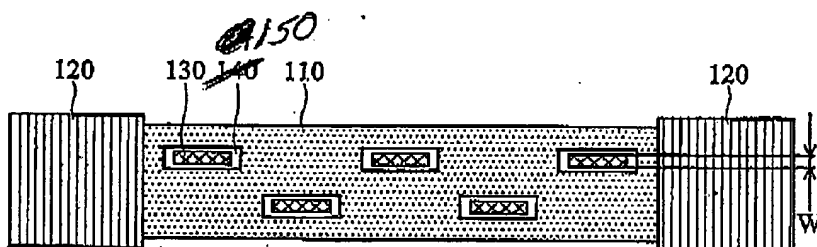


FIG. 6